

## ABSTRACT OF THE DISCLOSURE

A workpiece W serving as an object for detection is fixed in place. A camera 20 is mounted to the end of a robot RB. The camera is turned about an axis, which passes through the center position of the workpiece W and is perpendicular to the optical axis of the camera, to take an image of the workpiece W at a plurality of positions in different directions. A teaching model is generated on the basis of each produced image data. The relative position and posture of the workpiece to the camera 20 is also stored in association with the teaching model. Thus, it is possible to easily generate the teaching model of the workpiece regardless of three-dimensional variations in posture.